

OUTCOMES OF THE 18th SESSION OF THE COMMISSION

PREPARED BY: IOTC SECRETARIAT¹, 14 OCTOBER 2014

PURPOSE

To inform participants at the 16th Working Party on Tropical Tunas (WPTT16) of the decisions and requests made by the Commission at its 18th Session, held from 1–5 June 2014, specifically relating to the work of the WPTT.

BACKGROUND

At the 18th Session, the Commission **CONSIDERED** and **ADOPTED** 7 proposals as Conservation and Management Measures (7 in total consisting of 6 Resolutions and 1 Recommendation), as detailed below:

Resolutions

- Resolution 14/01 *On the removal of obsolete Conservation and Management Measures*
- Resolution 14/02 *For the conservation and management of tropical tunas stocks in the IOTC area of competence*
- Resolution 14/03 *On enhancing the dialogue between fisheries scientists and managers*
- Resolution 14/04 *Concerning the IOTC record of vessels authorised to operate in the IOTC area of competence*
- Resolution 14/05 *Concerning a record of licensed foreign vessels fishing for IOTC species in the IOTC area of competence and access agreement information*
- Resolution 14/06 *On establishing a programme for transshipment by large-scale fishing vessels*

Recommendations

- Recommendation 14/07 *To standardise the presentation of scientific information in the annual Scientific Committee report and in Working Party reports*

Pursuant to Article IX.4 of the IOTC Agreement, the above mentioned Conservation and Management Measures became binding on Members, 120 days from the date of the notification communicated by the Secretariat in IOTC Circular 2014–60 (10 June 2014, i.e. **8 October 2014**).

DISCUSSION

The Commission also made a number of general comments and requests on the recommendations made by the Scientific Committee in 2013, which have relevance for the WPTT as follows (paragraph numbers refer to the report of the Commission (IOTC–2014–S18–R):

The Commission addressed the list of recommendations made by the SC16 (Appendix V) from its 2013 report (IOTC–2013–SC16–R) that related specifically to the Commission. The Commission **ENDORSED** the list of recommendations, taking into account the range of issues outlined in this Report (S18) and incorporated within adopted Conservation and Management Measures. (para. 10 of the S18 report)

Skipjack tuna

NOTING that the SC expressed concerns on the ability of both the pole and line CPUE and the purse seine CPUE to reflect the dynamics of the stock, and given their major role in driving the current stock assessment results, the Commission **REQUESTED** that further investigation is carried out for both CPUE series. (para. 14 of the S18 report)

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Outlook on time-area closures

NOTING that the objective of Resolution 12/13 was to decrease the overall pressure on the main targeted stocks in the Indian Ocean, in particular yellowfin tuna and bigeye tuna, and also to evaluate the impact of the current time/area closure and any alternative scenarios on tropical tuna populations, the Commission **REQUESTED** that the SC (via the WPTT in 2014) undertake an analysis of the combined impacts of the two closed areas in the Indian Ocean (contained in Resolution 12/13 and the UK(OT) MPA), with the objective of determining the utility of closed areas in managing highly migratory species. (para. 23 of the S18 report)

Impacts of catching bigeye tuna and yellowfin tuna juveniles and spawners

The Commission **NOTED** however, that the fishery statistics available for many fleets, in particular for coastal fisheries, are not accurate enough for a comprehensive analysis as has been repeatedly noted in previous WPTT and SC reports. The Commission **REQUESTED** that the countries engaged in those fisheries take immediate actions to improve fishery statistics reporting to the IOTC Secretariat. (para. 27 of the S18 report)

Report of the 18th Session of the IOTC

The complete report of the 18th Session of the Indian Ocean Tuna Commission is available for download from the IOTC website:

- English: <http://iotc.org/documents/report-eighteenth-session-indian-ocean-tuna-commission>
- French: <http://iotc.org/fr/documents/rapport-de-la-dix-huitieme-session-de-la-commission-des-thons-de-l%E2%80%99oc%C3%A9an-indien>

RECOMMENDATION

That the WPTT

- 1) **NOTE** paper IOTC–2014–WPTT16–04 which outlined the main outcomes of the 18th Session of the Commission, specifically related to the work of the WPTT and **AGREE** to consider how best to provide the SC with the information it needs, in order to satisfy the Commission's requests, throughout the course of the current WPTT meeting.
- 2) **NOTE** the 7 Conservation and Management Measures (CMMs) adopted at the 18th Session of the Commission (consisting of 6 Resolutions and 1 Recommendation), and in particular, [Resolution 14/02 For the conservation and management of tropical tunas stocks in the IOTC area of competence](#); and [Recommendation 14/07 To standardise the presentation of scientific information in the annual Scientific Committee report and in Working Party reports](#), which have direct impacts on the work of the WPTT.

APPENDICES

Appendix A: Resolution 14/02 *For the conservation and management of tropical tunas stocks in the IOTC area of competence*

Appendix B: Recommendation 14/07 *To standardise the presentation of scientific information in the annual scientific committee report and in working party reports*

APPENDIX A**RESOLUTION 14/02****FOR THE CONSERVATION AND MANAGEMENT OF TROPICAL TUNAS STOCKS IN THE IOTC AREA OF COMPETENCE****The Indian Ocean Tuna Commission (IOTC),**

RECOGNISING that based on past experience in the fishery, the potential production from the resource can be negatively impacted by excessive fishing effort;

TAKING INTO ACCOUNT the available scientific information and advice, in particular the IOTC Scientific Committee conclusions whereby the yellowfin tuna stock might have been over or fully exploited and the bigeye tuna stock may have been fully exploited in recent years; RECOGNISING that during the 12th IOTC scientific meeting held in Seychelles from 30 November to 04 December 2009, the IOTC Scientific Committee recommended that yellowfin tuna and bigeye tuna catches should not exceed the MSY levels which have been estimated at 300,000 tonnes for yellowfin tuna and at 110,000 tonnes for bigeye tuna;

ACKNOWLEDGING that the implementation of a TAC without a quota allocation would result in an inequitable distribution of the catches and fishing opportunities among the IOTC Members and Cooperating Non-Contracting Parties (CPCs) and non-CPCs;

FURTHER RECOGNISING that the tuna artisanal fisheries sector needs strengthening in terms of catch statistics reporting in order to more closely follow the catch situations and notwithstanding improvement in the industrial fishery catch statistics reporting requirements;

NOTING the importance of applying the precautionary approach for the management of the tropical tuna and swordfish stock, in particular yellowfin tuna and bigeye tuna in the Indian Ocean;

ADOPTS, in accordance with the provisions of Article IX, paragraph 1 of the IOTC Agreement, the following:

1. CPCs shall implement the following action plan:
 - a) Establishment of an allocation system (Quota) or any other relevant measures based on the IOTC Scientific Committee recommendations for the main targeted species under the IOTC competence;
 - b) Advise on the best reporting requirement of the artisanal tuna fisheries and implementation of an appropriate data collection system.
2. This Resolution supersedes Resolution 12/13 *For the conservation and management of tropical tunas stocks in the IOTC area of competence.*

APPENDIX B
RECOMMENDATION 14/07
TO STANDARDISE THE PRESENTATION OF SCIENTIFIC INFORMATION IN THE ANNUAL SCIENTIFIC COMMITTEE REPORT AND IN WORKING PARTY REPORTS
The Indian Ocean Tuna Commission (IOTC),

RECOGNISING the importance of sound scientific advice as the centre piece for the conservation and management of tuna and tuna-like species in the Indian Ocean and adjacent seas in line with international law and the information needs of the Commission;

NOTING that participants of the first Global Summit of Tuna RFMOs in 2007 in Kobe, Japan agreed that stock assessment results be presented in a standardised "four quadrant, red-yellow-green-orange" format that is now referred as the "Kobe Plot" which is widely embraced as a practical, user-friendly method to present stock status information;

FURTHER NOTING that, at the Second Joint Meeting of Tuna RFMOs in June 2009 in San Sebastian, Spain, a "Strategy Matrix" was adopted to provide fisheries managers with the statistical probability of meeting management targets, including ending overfishing and rebuilding overfished stocks, in a standardised manner as a result of potential management actions;

AKNOWLEDGING that the Strategy Matrix is a harmonised format for RFMO science bodies to convey advice, and that this format for presenting stock assessment results facilitates the application of the precautionary approach by providing Commissions with the basis to evaluate and adopt management options at various levels of probability of success;

RECALLING recommendations of the Kobe II Workshop of Experts to Share Best Practices on the Provision of Scientific Advice and of the Kobe III recommendations, in particular on development on research activities to better quantify the uncertainty and understand how this uncertainty is reflected in the risk assessment inherent in the Kobe II strategy matrix;

FURTHER RECALLING the provisions of the Recommendation 12/15 *on the best available science*, that requests the provision of clear, transparent, and standardised formats for scientific advice delivered to the Commission;

TAKING INTO ACCOUNT that Resolutions 12/01 *on the implementation of the precautionary approach* and 13/10 *on interim target and limit reference points and a decision framework*, make possible the implementation of the precautionary approach thanks to the adoption of interim target and limit reference points;

NOTING the excellent work to date by the Scientific Committee, its working parties and the IOTC Secretariat to standardise the presentation of scientific information in their annual reports, including via the '*Executive Summaries*' for each stock;

STRESSING the importance of further refining the presentation of scientific information to facilitate appropriate utilisation by the Commission;

RECOMMENDS, in accordance with paragraph 8 of Article IX of the IOTC Agreement, that:

1. In support of the scientific advice made available by the IOTC Scientific Committee, the '*Executive Summaries*' within the annual IOTC Scientific Committee report which present stock assessment results, include when possible:

Stock status

- a) A Kobe plot/chart showing:
 - i. Any Target and Limit Reference Points adopted by the Commission, e.g. F_{MSY} and F_{LIM} , SB_{MSY} and SB_{LIM} or B_{MSY} and B_{LIM} , depending on the assessment models used by the Scientific Committee, or proxies where available;
 - ii. The stock estimates, expressed in reference to Target Reference Points adopted by the Commission, e.g. as $F_{CURRENT}$ on F_{MSY} and as $SB_{CURRENT}$ on SB_{MSY} or as $B_{CURRENT}$ on B_{MSY} ;
 - iii. The estimated uncertainty around estimates, provided that statistical methods to do so have been agreed upon the Scientific Committee and that sufficient data exist;

- iv. The stock status trajectory.
- b) A graphical representation showing the proportion of model outputs of the years used for advice from the last stock assessment that are within the green quadrant of the Kobe plot/chart (not overfished, not subject to overfishing), the yellow and orange quadrants (overfished or subject to overfishing) and the red quadrant (overfished and subject to overfishing).

Model outlooks

- c) Two Kobe II strategy matrices:
 - i. A first one indicating the probability of complying with the Target Reference Points adopted by the Commission, e.g. the probability of either $SB > SB_{MSY}$ or $B > B_{MSY}$ and of $F < F_{MSY}$ for different levels of catch across multiple years;
 - ii. A second one indicating the probability of being inside safe biological limits expressed through Limit Reference Points adopted by the Commission, e.g. the probability of either $SB > SB_{LIM}$ or $B > B_{LIM}$ and of $F < F_{LIM}$ for different levels of catch across multiple years;
 - iii. When the Commission agrees on acceptable probability levels associated with the target and limit reference points on a stock by stock basis, the Scientific Committee could prepare and include, in the annual report, the Kobe II strategy matrices using colour coding corresponding to these thresholds.

Data quality and limitations of the assessment models

- d) A statement qualifying the quality, the reliability and where relevant the representativeness of input data to stock assessments, such as, but not limited to:
 - i. Fisheries statistics and fisheries indicators (e.g. catch and effort, catch-at size and catch at age matrices by sex and, when applicable, fisheries dependent indices of abundance);
 - ii. Biological information (e.g. growth parameters, natural mortality, maturity and fecundity, migration patterns and stock structure, fisheries independent indices of abundance);
 - iii. Complementary information (e.g. consistencies among available abundance indices, influence of the environmental factors on the dynamic of the stock, changes in fishing effort distribution, selectivity and fishing power, changes in target species).
- e) A statement qualifying the limits of the assessment model with respect to the type and the quality of the input data and expressing the possible biases in the assessment results associated with uncertainties of the input data;
- f) A statement concerning the reliability of the projections carried out over the long term.

Alternative approach (data poor stocks)

2. When, due to data or modelling limitations, the IOTC Scientific Committee is unable to develop Kobe II strategy matrices and associated charts or other estimates of current status relative to benchmarks, the IOTC Scientific Committee will develop its scientific advice on available fisheries-dependant and fisheries-independent indicators and provide similar caveats as those detailed in paragraph 1(d).

Additional information and review of the structure and templates of the 'Executive Summaries'

3. The Commission encourages the IOTC Scientific Committee to include either in its annual report or in the detailed reports, where possible and if considered as relevant and useful, any other tables and/or graphics supporting scientific advice and management recommendations. In particular, the IOTC Scientific Committee will include, where possible, information on the recruitment trajectories, on the stock-recruitment relationship and some ratio such as yield per recruit or biomass per recruit.
4. As far as needed, the IOTC Scientific Committee shall review recommendations and templates for the Kobe II strategy matrices, plot and graphical representations as laid down in this Recommendation and will advise the Commission on possible improvements.